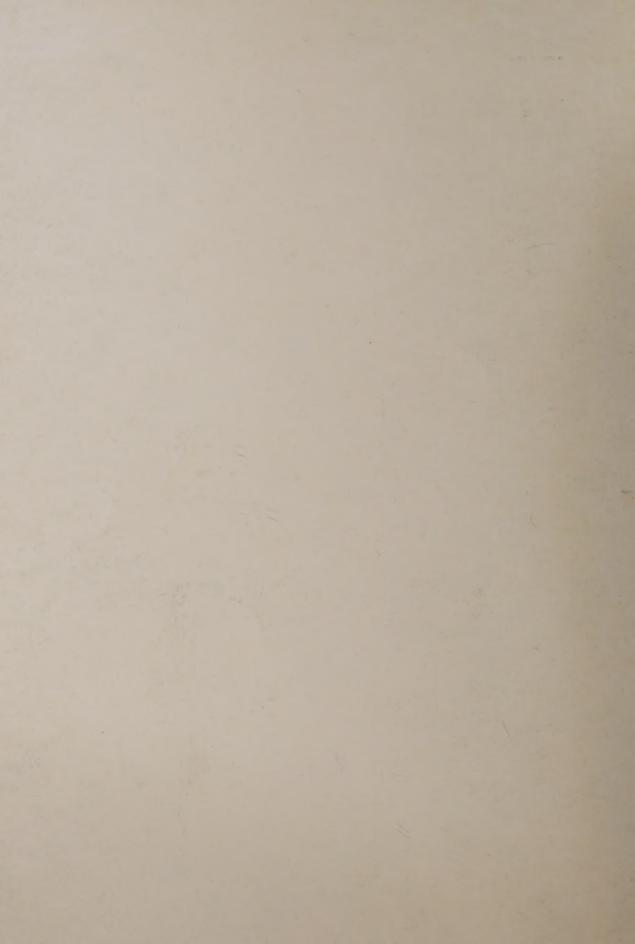
THE STEEL WENT NORTH

A Brief History of The White Pass and Yukon Route

Papers presented at

Transportation Conference.

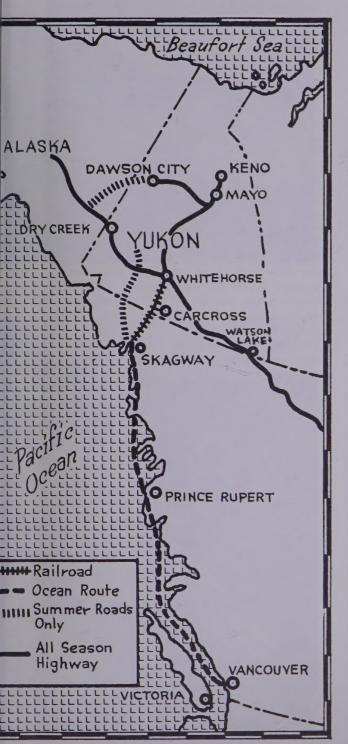
POLAR PAM 5047 POLARPAM







WHITE PASS & YUKON ROUTE



THE STEEL WENT NORTH

by Roy Minter

n August 17, 1896, George Carmack and two Indian companions, Skookum Jim and Dawson Charlie, discovered gold on Bonanza Creek in the Klondike Valley. The few flakes they gleaned from the creek bottom hardly filled a spent rifle cartridge, but it was enough to trigger the Klondike Gold Rush which became one of the most lively and colourful events in Canadian history.

The mad stampede which followed created such a furor throughout North America and the rest of the world that the names "Klondike" and "Yukon" became synonymous with untold riches. The excitement of the times ripped through the quiet communities of Canada and the United States like a tidal wave and suddenly gold fever was rampant. Men sold their homes and businesses and headed for the Yukon, urged on by the vision of flake and nugget. Thousands of black-suited and bowler-hatted gold seekers gathered on the docks of Vancouver, Seattle and Victoria to haggle with shipping agents for passage to Skagway. Overburdened coastal ships bulged with eager men propelled north to the Yukon by the magic power of gold.

They landed at Skagway, Alaska and transferred their outfits from the ships to their backs and started the forty mile trek over the White Pass and Chilcoot Pass to the head of Lake Bennett, B.C. Here with hand-hewn timber they built boats and rafts to carry themselves and their outfits by water through Lake Bennett, Marsh Lake and the Yukon River to Dawson, in the heart of the Klondike Gold Fields.

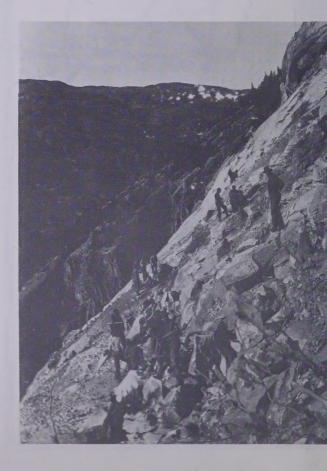
It is estimated that over one hundred thousand people swarmed through Dawson during the height of the Rush. Soon banks, dance halls, schools, churches, stores and government buildings were constructed, and by 1899-1900 Dawson had become one of the most important cities in Western Canada.

It was evident from the start that the requirements of the Klondike Gold Fields and its attendant population could not be met without a permanent and properly organized transportation system. Early in 1898 this major problem was solved by a happy meeting of two imaginative and colourful men who were separately investigating the possibility of constructing a railway from Skagway, Alaska, to Whitehorse, Yukon, one hundred and ten miles to the north. Sir Thomas Tancrede represented an English group which was ready to finance such a railway, but after close examination of the terrible problems involved, Sir Thomas was fast approaching the conclusion that the terrain was beyond the abilities of railway engineers. The mountains looked too high and the grades too steep. Later, while sitting in a Skagway hotel, he decided the project was far beyond reach.

Fortunately, Canadian railway contractor Michael J. Heney, also known as "The Irish Prince", had just returned to Skagway after making an independent examination of the White Pass, and was convinced that a railroad could be constructed through the rugged St. Elias Mountain Range which separates Yukon from the sea. He was equally convinced that he was the one who could do it. By chance, Big Mike Heney and Sir Thomas met at Skagway, They appraised each other and both recognized qualities they admired. Soon they were immersed in the problems of building a railroad through the toughest railroad country in North America. They talked far into the night: by early morning the construction of the railroad was no longer a dream, but an accepted challenge that would demand everything "Big Mike" Heney had to offer, and more besides.

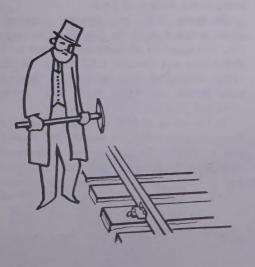
The White Pass & Yukon Route was organized in the spring of 1898, and construction began with the arrival of material at Skagway, May 27, 1898. Almost immediately the ribbons of steel pointed north towards the White Pass. By July 21, 1898, a passenger train was placed in service and it operated a distance of four miles. This was the first train to run in Alaska and the furthest north any train ever operated on the North American Continent.





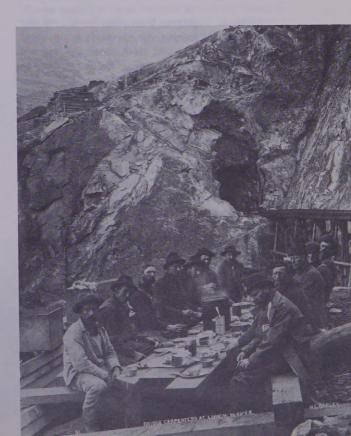
By February 18, 1899, the track reached the Summit of White Pass and by July 6th construction reached the head of Lake Bennett in British Columbia. While the southern gangs blasted and hacked their way through the Pass, construction started from Whitehorse towards Carcross. The two construction groups met at Carcross July 29, 1900, where the golden spike ceremony was attended by S. H. Graves, the company's first President, and a colourful group of Canadian and American civil and military dignitaries. According to Mr. Graves' diary the ceremony was a highly entertaining event.

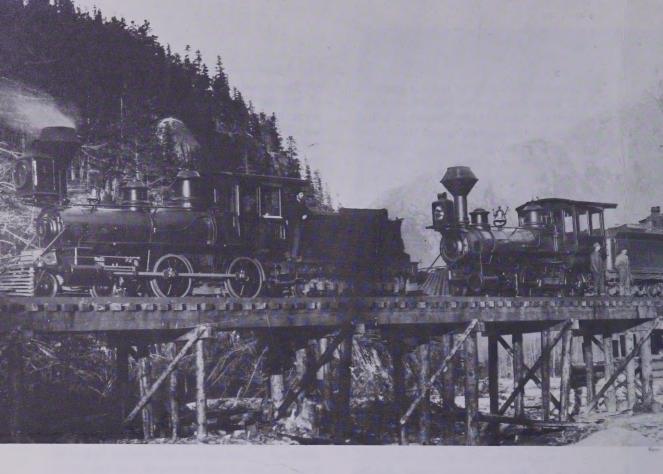
Started by an experienced trackman "the spike" stood upright and gleaming beside the rail. The officials, who were to share the honour of driving the spike home, approached it with considerable misgiving as it was generally conceded by both the crowd and officials that enthusiasm for the task might not completely overcome the effects of Yukon's lavish hospitality. Mr. Graves, being a good host, invited the senior American Army officer to "strike the first blow". After a series of disastrous attempts, the spike, while bent, was clearly the winner. Others took up the challenge, cheered on by the celebrating crowd, but the spike which by now had the general characteristics of a piece of boiled spaghetti, successfully stood its ground. The official party eyed the spike in silence and finally accepting defeat, slowly retired from the affray to partake of better things. While leaving the scene, Mr. Graves caught the eye of the track Superintendent, who unobtrusively replaced the historic spike with a less noble one and unceremoniously drove it home.



The construction of the railroad was one of the most difficult ever engineered. It was a thousand miles from the closest base of supplies, and communications between Skagway and Seattle were confined to letter post carried by coastal steamships, which operated an irregular service. There was no heavy construction equipment. With nothing but horses, shovels, black powder and men, the right-of-way was hacked through barriers of solid rock. Vast quantities of powder were used and in one case a cliff 120 feet in height, 70 feet in depth and 20 feet in thickness was blasted away. In some instances the mountainsides were so steep that the determined railroad builders were suspended by ropes so they could carve the grade without hurtling off the sheer cliffs.

Probably no tunnel in the world was built under greater difficulties than the one which penetrated a perpendicular barrier of rock jutting out of the mountainside like a giant flying buttress. Machinery and equipment to construct this 250-foot tunnel were manhandled up the most precipitous cliffs, which provided workers with only the barest of footholds.





A short distance from the Summit of the Pass a deep canyon is spanned by a steel cantilever bridge, 215 feet from the creek's bed. Below, in Dead Horse Gulch, winds the old White Pass Trail, worn into the native rock by thousands of sourdoughs who formed the long black line of humanity we associate with the Gold Rush and the Trail of '98.

From the sea level at Skagway, this narrow gauge railroad climbs to the Summit of the Pass (2,885 feet) in only 21 miles. The average grade to the Summit is 2.6% with the steepest grade about 4%. The highest point on the line is Log Cabin, B.C., MP 33, which has an altitude of 2,916 feet. The line from terminal to terminal is 110.7 miles. Of this, 20.4 miles are in Alaska, 32.2 miles are in B.C. and 58.1 miles are within the Yukon Territory.

The new railroad was placed in regular service by August, 1900, although segments of the incomplete line, augmented by horse-drawn wagons, had provided regular service into Whitehorse since early 1899.

At Whitehorse freight and passengers were transferred to the Yukon River sternwheeler and carried north to Dawson. Because the river service was irregular and generally unreliable the fleet was acquired by the company in 1901. To operate the river service the British Yukon Navigation Co. was organized. It became the River Division of the White Pass & Yukon Route and operated the Yukon River sternwheelers for over half a century, the last run being in the summer of 1955.

In March, 1901, the company acquired the winter stage line of the Canadian Development Co., and operated horse-drawn vehicles between Whitehorse and Dawson City during the closed winter season of river navigation. This operation, known as "The Royal Mail Service", continued until 1921.

In the spring of 1937 the White Pass & Yukon Route organized the air service and carried all classes of mail, freight, express and passengers throughout the Yukon Territory. This pioneer Yukon air transport service was eventually

sold (in December, 1941) to Yukon Southern Air Transport, which was headed by one of Canada's outstanding bush pilots, Grant W. McConachie.

Since the beginning of 1898 until today the WP & YR has provided transportation to meet the requirements of every phase of Yukon development. This service was maintained under the most difficult conditions during the twenties and thirties when gold production fell off and Yukon's population declined to a point where it almost ceased to count.

Despite the declining activity in the production of gold, other mining operations continued. Silver, lead and zinc production developed in the Mayo mining district, and the ore was carried to tidewater by the combined services of the White Pass River and Rail Divisions. Dawson City and Whitehorse maintained a reasonable level of business during the summer mining and prospecting seasons, but business activity dropped to an extremely low level during the winter.

Throughout the summers of the twenties and thirties tourists arrived by the thousands to visit the land of the midnight sun. This annual influx of visitors contributed substantially to the maintenance of Yukon's shaky economy. During a large part of this period White Pass operations were maintained mostly by the sheer determination of its management and little else.

Then — with unprecedented impact — World War II burst upon the scene. By 1941 an overland link between Continental United States and Alaska was being advocated, but not completely accepted. The Japanese attack on Pearl Harbour hushed the objectors and within a matter of days the groundwork for the construction of the Alaska Highway was laid. Once again the White Pass & Yukon Route found itself playing a major role in a human drama set in the far north.

Hundreds of thousands of tons of military machinery and equipment poured over the White

Pass from the Port of Skagway and turned the sleepy town of Whitehorse, with a population of less than a thousand, into a heavily populated military camp. Construction of the Alaska Highway started March, 1942, and in the incredibly short time of only nine months the 1,500-mile highway from Dawson Creek, B.C., to Fairbanks, Alaska, was completed.

The immense work load placed on the railroad during the war was so great it was necessary to pass control of the railway to the U.S. Army, with its unlimited manpower and equipment. The operation was returned to company management July, 1946.

During World War II the company's stern-wheelers did yeoman service delivering material to remote Alaska Highway construction areas located near Yukon's inland waterways. Because of the strategic importance of the Alaska Highway and the tremendous quantities of material required for its construction it was necessary to operate the riverboats far beyond the normal summer season. Despite ice and low water the huge loads were delivered on schedule without loss of freight or undue damage to the faithful sternwheelers.

Another project undertaken by the company during the war was the construction of airports and airstrips for the North West Staging Route. These airstrips later became known as "Bomber Road" due to the part they played in delivering bomber and fighter planes to the Allies.

Since the end of World War II, mining, prospecting, oil exploration and the Federal Government roads-to-resources program have sharpened both national and international interest in Canada's northlands. With these developments the annual volume of shipments both in and out of the north increased, and this increase has been accompanied by a growing awareness of transportation costs and requirements.

The White Pass & Yukon Route tackled



the Yukon's post-war transportation problems by developing, in 1953, a completely integrated shiptrain-truck transportation system using five hundred and fifty all metal 7' x 8' x 8' containers as the prime shipping unit. Some of the containers were "temperature-controlled" which permitted the transporting of perishable goods.

To handle the ocean leg between Vancouver and Skagway the White Pass built the world's first container ship, the 4,000 ton CLIFFORD J. ROGERS, which went into service November 26,

1955.

Providing a transportation service for an area as large as the Yukon and Northern British Columbia is a challenging and demanding task. It is demanding because the capacity of the system must always be a step ahead of current transportation needs; it is demanding because the system must serve its northern customers on a scheduled basis despite the vagaries of the North's unpredictable weather. It is with these thoughts in mind that the White Pass introduced a completely upgraded container system in 1965. Based on the container concept first introduced by the company in 1955, the new transportation system includes a new 6,000 ton ship, M.V. FRANK H. BROWN, larger containers, huge straddle carriers for more efficient container handling at terminals, improved docks, new terminals and a variety of upgraded railway facilities representing an investment of over \$8,000,000.

Choosing the right moment to upgrade the transportation system and increase their carrying capacity was not an easy task, particularly when not all White Pass transportation facilities were being used to the fullest capacity. But there was the future to consider. Without sufficient permanent transportation, the North cannot realize its potential—for a sound transportation system is

mandatory to the future development of the Yukon and Northern B.C.

What does the future hold for the Yukon? The future will be found embedded in the depths of its land and the hearts of its people who will seek, and by seeking, discover. There is no satisfying answer for the unknown but, like all frontiers, the Yukon has its challenge of the untamed, its excitement of imminent discovery, its spirit of perpetual optimism, its expressions of faith and its burden of hard work, all of these encouraged by a dream or two.

The dreams of Sir Thomas, Samuel H. Graves and Michael J. Heney were realized over sixty-five years ago with the completion of Yukon's rail link to the sea. Ever since, the Yukon and the White Pass & Yukon Route have enjoyed a productive partnership, which has contributed a large measure of stability to Northern development—a development based mainly on Yukon's natural resources and the means to move them to the markets of the world.

Today the White Pass "Container Route" is carrying freight from Vancouver, B.C., to the Yukon and Northern B.C. with a completely integrated transportation system, including a 6,000 ton container ship of the most modern design, a fleet of custom-built heavy duty locomotives tractor-trailer units, modern freight handling equipment, plus higher capacity 8' x 8' x 25'3" temperature-controlled containers, which are the key to this integrated ship-train-truck transportation system.

It's a safe bet that Heney, Sam Graves and Sir Thomas would approve of the Route's steady progress and development, for today the White Pass is recognized as a world pioneer in containerized freight and integrated transporation.

Now "Phased Out" of scheduled service, the 4,000 ton "Clifford J. Rogers" was a world pioneer container ship. She was in regular service for 10 years.









Freight containers are moved between ship, trains and trucks by six "Straddle Carriers". Two are located at Vancouver, two at Skagway and two at Whitehorse.

M/V Frank H. Brown discharging Yukon-bound cargo at Skagway, Alaska.









